Pat McCrory, Governor Frank L. Perry, Secretary

Michael A. Sprayberry, Director

MEMORANDUM

To: Land surveyors interested in performing a county boundary resurvey project

From: Dennis Lee, PLS

State and County Boundary Surveyor

Subject: Report of survey outline for a county boundary resurvey project

Date: May 1, 2014

The North Carolina Geodetic Survey (NCGS) requires that each submitted report of survey for a contracted county boundary survey project must be <u>clear</u>, <u>accurate</u>, <u>brief</u>, and <u>complete</u>. Therefore, in order to maintain consistency, please use the attached outline as the basic structure for a report of survey. Since each contracted project generally involves both common requirements as well as site/condition specific requirements, surveyors may need to:

- Omit non-applicable sections from this basic outline
 - ~ and/or ~
- Add sections that were not stipulated in this basic outline

If you have questions about the requirements of a particular project and/or are interested in inquiring about available projects, please contact the County Boundary Surveyor below:

Direct line: 919-948-7841
Main office: 919-733-3836
Fax: 919-733-4407

• Email: LDennisLee@ncdps.gov

Mail: Attn: Dennis Lee, County Boundary Surveyor

North Carolina Geodetic Survey 4298 Mail Service Center Raleigh, NC 27699-4298

Thank you.

Dennis Lee, PLS County Boundary Surveyor

> MAILING ADDRESS: 4298 Mail Service Center Raleigh, NC 27699-4298 geodeticsurvey.nc.gov



OFFICE LOCATION:

4105 Reedy Creek Rd Raleigh, NC 27607 Telephone: (919) 733-3836 Fax: (919) 733-4407

Report of survey outline for a county boundary resurvey project

1. Identification and description

- 1.1. Location of project
- 1.2. Client
- 1.3. Dates of project
- 1.4. Type of project
- 1.5. Surveyor's contact information (name, PLS and/or PE number, firm, address, phone, fax, email)

2. Purpose and objectives

- 2.1. Purpose
- 2.2. Objectives
- 2.3. Scope of project
 - 2.3.1. Personnel required
 - 2.3.2. Equipment resources required
- 2.4. Cost
- 2.5. Timeline

3. Background and history of the county boundary project

4. Personnel, equipment, & methods

- 4.1. Personnel (name, position, and address of each person working on project)
- 4.2. Equipment (type, model, serial number, and date of most recent calibration of each survey instrument and computer software used in project)
 - 4.2.1. Field equipment
 - 4.2.2. Computer software
- 4.3. Methods
 - 4.3.1. Records search
 - 4.3.2. Field survey

5. Records research & data collection

- 5.1. Offices and individuals
 - 5.1.1. Offices and individuals actually contacted or visited (name, position, agency, address, telephone, email, permission status, and note)
 - 5.1.2. Offices and individuals not contacted or visited, but believed to have relevant documents or information (name, position, agency, address, telephone, email, reason for not contacting, and note)
 - 5.1.3. Landowner entry permissions (name, address, telephone, email, permission written or verbal, special conditions or limitations for access)

5.2. Evidence

- 5.2.1. Records evidence
 - 5.2.1.1. Records found [list by type (deed, plat, will, etc.) and include party or title identification, repository, and date]
 - 5.2.1.2. Records searched for, but not found
 - 5.2.1.3. Records not searched for, but relevant

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Report of survey outline for a county boundary resurvey project

5. Records research & data collection

- 5.2. Evidence
 - 5.2.2. Field evidence
 - 5.2.2.1. Physical
 - 5.2.2.1.1. Found
 - 5.2.2.1.2. Searched for, but not found
 - 5.2.2.1.3. Not searched for, but relevant
 - 5.2.2.2. Parol evidence (oral or verbal)
 - 5.2.3. Other relevant evidence
- 5.3. Survey Data Collection
 - 5.3.1. Raw field data (observations):
 - 5.3.1.1. Data collector printouts or digital files
 - 5.3.1.2. Field books
 - 5.3.1.3. Other data
 - 5.3.2. Environmental and other field data

6. Evidence analysis and data adjustment

- 6.1. Evidence analysis and discussion
 - 6.1.1. Problem resolution and reasoning
 - 6.1.2. Unusual items: encroachments, gaps, occupation, possession, etc.
- 6.2. Data adjustment
 - 6.2.1. Methods used
 - 6.2.2. Weights
 - 6.2.3. Constraints
 - 6.2.4. Error of closure
 - 6.2.5. Reasoning

7. Results of records search and field work

- 7.1. Records search results
- 7.2. Field work
 - 7.2.1. Best estimate of each position
 - 7.2.2. Uncertainty of position or error of closure

8. Conclusions and sources of error

- 8.1. Weight of the evidence decisions
- 8.2. Survey work products: (digital and/or hardcopy)
 - 8.2.1. Monumentation
 - 8.2.1.1. Control data sheets
 - 8.2.1.2. County Boundary Mark Restoration certificates (certified)
 - 8.2.1.3. Photos
 - 8.2.2. Plat of survey
 - 8.2.3. Legal description
 - 8.2.4. Report of survey
- 8.3. Sources of error
- 8.4. Records distribution

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Report of survey outline for a county boundary resurvey project

Recommendations

Please use the following numbered block format (written in Lorem ipsum dummy text) in the report, such that each section title and content are not indented as in an outline, but starts at the left margin:

Section title (i.e. 8.2.3. Legal description)

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Next section title (i.e. 8.2.4. Report of survey)

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